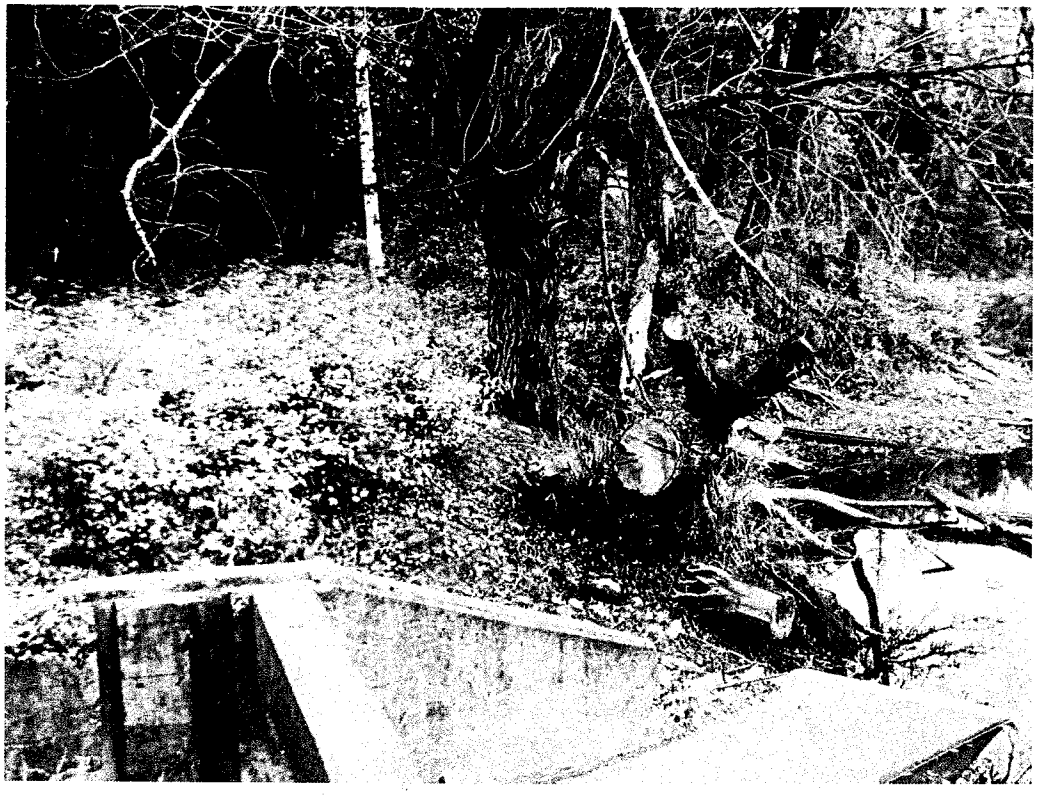

Figure 1-3 - Trees and stumps on embankment

1.3.3 Deteriorated Concrete Diversion Structure

There is a small concrete structure (bifurcation structure) that allows for the diversion of the stream into the reservoir or onto the abutment downstream of the dam. This structure is in poor condition and is generally inoperable.

1.3.4 Inadequate Spillway Capacity

According to State of Montana spillway design standards, the spillway capacity is based on the estimated loss of life caused by a failure of the dam. Overtopping of a paved road and low impact flooding of a single residence results in a required minimum spillway capacity equal to the 500-year flood. HKM Engineering calculated the 500-year flood peak to be 145 cfs. The 500-year flood could result in a reservoir level that overtops the dam, thus the reservoir is not in compliance with current spillway design standards.

The Montana Dam Safety Program enacted a reservoir level restriction on Smith Lake, until the dam is rehabilitated to pass the 500-year flood. Spillway stop logs were removed, reducing the reservoir level to 3 feet below normal operating pool. This low pool level resulted in a loss of the fishery.